

Management questions related to the current and potential future impacts from hydrologic alteration on biological communities within the Potomac River basin portion of the Fractured Rock area.

What types of streams (e.g., headwater creeks or karst geology) are most/least sensitive to hydrologic alteration?

What streams and watersheds are most/least at risk of flow alteration due to future hydrologic alteration, specifically water withdrawal?

What seasonal components of the natural flow-regime need to be maintained for specific types of streams under drought conditions and hydrologic alteration scenarios?

How much impact is associated with various levels of hydrologic alteration? For example, how much must surface water withdrawals or impervious surfaces increase by to result in a 50% change in hydrologic alteration?

Which components of the natural flow-regime have the most influence on benthic macroinvertebrate communities?

Which benthic macroinvertebrate families are most/least sensitive to hydrologic change?

Do benthic macroinvertebrate community indicators of hydrologic alteration exhibit a level of resiliency to change, and if so how much hydrologic alteration can be tolerated?

Which areas important for stream biodiversity and conservation are likely to be affected by hydrologic alteration in the future given population growth, water demand, and climate change projections?